

NEW REARED BRACONIDAE FROM TRINIDAD  
(HYMENOPTERA)

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In the course of studies concerned with the biological control of *Ancylostomia stercorea* (Zeller), a phycitid which is a serious pest of pigeon peas in Trinidad, several new parasites have been reared for which names have been requested. Three new Braconidae which have been submitted to me for identification are described here, and in addition, a second new *Phaenrotoma* which is very similar to the one from *Ancylostomia*.

***Bracon cajani***, new species

From *Bracon thurberiphagae* (Mues.), which often parasitizes the same host, this species may be distinguished at once by its smooth and polished abdomen, the complete lack of notaulices, and the much longer ovipositor which is nearly or quite as long as the thorax and abdomen combined.

*Female*.—Length of type about 3.5 mm. Head, thorax and abdomen smooth and polished, with only the face delicately alutaceous and mat; face receding; temple receding slightly, much narrower than eye; antennae usually 23- to 28-segmented; suture at base of scutellum very fine pitted; propodeum without the usual short median longitudinal keel or carina at apex; second tergite (fig. 3) with a shallow, somewhat curved, longitudinal groove each side toward lateral margin, and with posterior margin strongly sinuate.

Yellowish ferruginous; antennae, including scapes, black; mesopectus, and lateral mesonotal lobes posteriorly, sometimes more or less blackish; hind tibiae at extreme apices and hind tarsi black; tegulae yellow; wing bases blackish; forewing somewhat infumated toward base, hyaline apically, veins dark, stigma light brown but outlined with dark brown.

*Male*.—Essentially like the female, but with the fifth or sixth tergites, or both, sometimes blackish medially.

*Type*.—U. S. National Museum No. 62539.

*Type locality*.—St. Augustine, Trinidad, B. W. I.

Described from the following material, all reared from *Ancylostomia stercorea* (Zeller) in pigeon peas by F. D. Bennett except as otherwise noted: Three ♀♀ (including type) and two ♂♂, St. Augustine, Trinidad, February 1952; two ♀♀, Paradise Mt., Trinidad, March 1953; four ♀♀ and seven ♂♂, Paradise Mt., Trinidad, January 1952; ten ♀♀ and five ♂♂, Tacarigua, Trinidad, December 1951, F. J. Simmonds; two ♀♀, Arouca, Trinidad, December 1951, F. J. Simmonds; eight ♀♀ and three ♂♂, St. Augustine, Trinidad, May 5, 1949, E. McC. Callan; one ♀ and three ♂♂, St. Augustine, Trinidad, June 9, 1942, R. G. Femah, and two ♀♀, Paradise Mt., Trinidad, March 1952.

***Apanteles etiellae isolatus***, new subspecies

Structurally this appears to be identical with typical *etiellae* Viereck, but it may be distinguished at once by its clear hyaline stigma. In *etiellae* the stigma is dark brown.

*Type*.—U. S. National Museum No. 62542.

*Type locality*.—St. Augustine, Trinidad, B. W. I.

Described from the following specimens, all reared from *Ancylostomia stercorea* (Zeller) in pigeon pea; Eleven ♀♀ (including type) and six ♂♂, St. Augustine, Trinidad, May 5, 1949, E. McC. Callan; one ♀ and two ♂♂, Tacarigua, Trinidad, December 1951, F. J. Simmonds; three ♀♀, St. Augustine, Trinidad, February 1952, F. D. Bennett; five ♀♀ and two ♂♂, Paradise Mt., Trinidad, January and March 1952, F. D. Bennett; three ♀♀ and two ♂♂, St. Augustine, Trinidad, June 1942, R. G. Fennah; three ♀♀, Grenada, March 1954, F. D. Bennett, five ♀♀ and three ♂♂, British Guiana, February 1954, F. D. Bennett; two ♀♀ and one ♂, Virgin Gorda, V. I., February 1954, and two ♀♀ and one ♂, Roseau, Dominica, B. W. I., May 1954, F. D. Bennett.

***Phanerotoma bennetti*, new species**

Distinguished from the following species, which it closely resembles superficially, in having the second abscissa of the radius much longer than the first, in its shining clypeus, and in usually having only the apex of the scutellum black.

*Female*.—Length about 4 mm. Face more than twice as wide as long from base of antenna to clypeal fovea, very finely rugulose; eyes large and prominent; malar space less than half as long as clypeus and shorter than distance from clypeal fovea to eye; clypeus very large, smooth and shining, with only scattered and very shallow punctures, its lower margin broadly rounded; extreme width of temple less than half width of eye; frons and vertex transversely rugulose on a delicately granular surface; antenna 23-segmented, the apical segments somewhat flattened, much shortened and narrowed. Mesoscutum uniformly granularly rugulose; notaulices weakly suggested anteriorly; disc of scutellum with fine longitudinal sculpture; propodeum finely granular, with an incomplete transverse carina slightly before middle and a few short rugae extending forward from it; pleura finely granular and dull; hind coxa shining, a little alutaceous on outer side; hind tibia strongly thickened apically, its longer calcarium more than half as long as hind metatarsus; first abscissa of radius much shorter than second and shorter than width of stigma; second abscissa of radius nearly or quite as long as second intercubitus and much more than half as long as first intercubitus; recurrent vein entering first cubital cell very near apex; basal vein and cubitus widely separated at origin or parastigma. Abdomen longitudinally rugulose; third tergite slightly longer than first and much longer than second; first with two longitudinal carinae originating at basal lateral angles and converging caudad, obsolescent on apical fourth of tergite; ovipositor sheath only very little exerted.

Yellow; stemmaticum, apices of antennae, apical spot on scutellum and a smaller one on middle of metanotum, blackish; third tergite rather reddish yellow; wings hyaline, forewing with a small, faintly fuscous blotch below stigma and another in the region of the nervulus; hind tibia yellowish brown at base and dark brown on apical two-fifths.

*Male*.—Like the female except that the antennae are longer and more slender.

*Type*.—U. S. National Museum No. 62540.

*Type locality*.—Paradise Mt., Trinidad, B. W. I.

Described from the following specimens, all reared from *Ancylostoma stercorea* (Zeller) in pigeon peas: Three ♀♀ (including type) and two ♂♂, Paradise Mt., Trinidad, March 1952, F. D. Bennett; one ♀, Arouca, Trinidad, December 31, 1951, F. J. Simmonds; one ♀, St. Augustine, Trinidad, February, 1952, F. D. Bennett; one ♂ St. Augustine, Trinidad, May 17, 1949, E. McC. Callan; one ♂, Tacarigua, Trinidad, December 1951, F. J. Simmonds; one ♀, British Guiana, February 1954, F. D. Bennett; and one ♀ and three ♂♂, St. Augustine, Trinidad, June 9, 1942, R. G. Fennah.

I am pleased to name this species for Mr. F. D. Bennett who has done some excellent work in the field of biological control of insect pests, first in Bermuda and more recently in Trinidad.

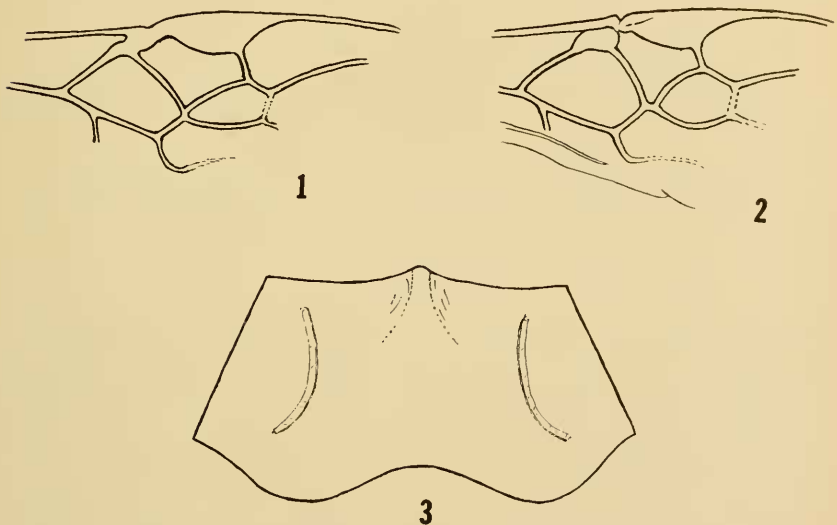


Fig. 1; *Phanerotoma nigripelta*, central portion of forewing. Fig. 2; *Phanerotoma bennetti*, central portion of forewing. Fig. 3; *Bracon cajani*, second abdominal tergite.

#### *Phanerotoma nigripelta*, new species

In having the disc of scutellum evenly granular and entirely black, and in the relatively short abscissa of radius, this form differs from all known related species.

*Female*.—Length nearly 4 mm. Face at narrowest point twice as wide as its length to base of clypeus; temple finely granular, about half as wide as eye; antenna shorter than body, 23-segmented, much narrowed at apex, some of the segments of apical third not or barely as long as broad; mesoscutum evenly granular and opaque; notaulices indicated only at anterior margin of mesoscutum; disc of scutellum uniformly finely granular and dull, not at all longitudinally

sculptured as in *bennetti*; propodeum granular, medially and posteriorly also more or less coarsely reticulate; pleura finely, evenly granular and mat; first abscissa of radius as long as the second which is less than half as long as first intercubitus; recurrent vein interstitial with first intercubitus or entering extreme base of second cubital cell; inner calcarium of hind tibia barely half as long as hind metatarsus. Abdomen strongly longitudinally rugulose striate; first and third tergites subequal in length, the second shorter; first tergite with two prominent carinae arising at basal lateral angles, converging and growing gradually weaker caudad, sometimes attaining posterior margin of tergite.

Honey yellow; apical eight or ten segments of antenna infuscated; a black, roughly quadrate spot on scutellum taking in all of the disc; metanotum with a much smaller, median black spot; abdomen with an interrupted blackish streak down middle beginning near middle of first tergite; wings hyaline, forewing weakly infuscated behind stigma and behind first discoidal cell; legs very pale with only apices of hind tibiae a little brownish.

*Type*.—U. S. National Museum No. 62541.

*Type locality*.—St. Augustine, Trinidad, B. W. I.

Described from four ♀♀ reared April 8, 1954 from a lepidopterous larva on *Tephrosia* by F. D. Bennett.

#### FIRST PRECISE LOCALITY RECORD OF HESPEROCIMEX COLORADENSIS LIST FROM MEXICO

(HEMIPTERA, CIMICIDAE)

On August 24, 1954, several hundred specimens of *Hesperocimex coloradensis* List were collected 18 miles southeast of Guaymas, Sonora, Mexico, from a nest containing well-feathered nestling Purple Martins (*Progne subis*). The nest was located in an abandoned woodpecker's hole, 15 feet above the ground in a cactus identified as *Pachycercus pecten-aboriginum*. The bedbugs were collected by R. E. Ryckman, C. P. Christianson, and D. Spencer.

This is the first specific locality record of this species from Mexico. List (1925, Proc. Biol. Soc. Wash. 38:103-110) pointed out that Horvath (1912, Am. Mus. Natl.-Hist. Nat. Hungary 10:257-262) had a specimen of this species labeled "Mexico" but had it confused with *Oeciacus vicarius*. The only other record for *H. coloradensis* is given by List from Colorado Springs, Colorado, collected by W. D. Edmonston. Professor List indicated (*in litt.*) that he had returned to Colorado Springs a few years ago in search of the bug but was unsuccessful in finding it.

The authors acknowledge with appreciation the assistance of Drs. R. L. Usinger and F. A. Pitelka of the University of California, Berkeley, for identifying the bedbugs and the host, and Professor Edmund C. Yaeger, Riverside, California, for identifying the cactus. Specimens of *H. coloradensis* have been placed in the California Academy of Sciences, in the California Insect Survey, Berkeley, and in the United States National Museum. A live colony is being maintained for research purposes in the Department of Entomology, School of Tropical and Preventive Medicine.—ROBERT D. LEE and RAYMOND E. RYCKMAN, *Department of Entomology, School of Tropical and Preventive Medicine, Loma Linda, California.*